EK–KA670–UP–001

KA670 Technical Manual Update

This document provides updated information for the *KA670 CPU Module Technical Manual*, EK–KA670–TM–001.

SSC Configuration Register, Bits <18:16> (Page 128)

The third sentence in the bit description for bits <18:16> (Halt Protect Space) should read "These bits should be set to 101_2..."

Setting these register bits to 110_2 allows the SSC to protect 512 Kbytes. This is unnecessary, because the EPROM contains only 256 Kbytes.

Network Interface SGEC Revision 4.0 (Pages 148 to 198)

The SGEC revision 4.0 needs a code patch if the virtual addressing mode (SVAPTE or PAPTE) is used for addressing the transmit buffers.

To apply this patch, perform the following steps:

1. Set the following diagnostic descriptor in the transmit descriptor list (page 178), to download the code into the SGEC internal memory. This descriptor must be placed before the setup_frame descriptor (page 184) with <IC> set, or must be followed by an end_of_list (descriptor owned by the host) to be able to synchronize the code load completion on NICSR5<TI> interrupt.

   Diagnostic descriptor format:

DDES0<31:0>	= 80000000_{16}	OW = 1.
DDES1<31:0>	= 30800000_{16}	DT = 3, WD = 1, ST = 0.
DDES2<31:0>	= $000B22AA_{16}$	load size = 11 code words, SGEC load address = $22AA_{16}$.
DDES3<31:0>	= Buffer physical address	must be word-aligned.

   The buffer pointed to by DDES3 must contain the following data:

   $D8541E79_{16}$

   $FF7FDA53_{16}$

   $C0195E79_{16}$

   $D951C018_{16}$

   $C3575E79_{16}$

   $0000031C_{16}$

2. After setting NICSR5<ID> (page 155) and before starting the receive or transmit process, perform the following steps:
   - Load the host address of the diagnostic descriptor in NICSR4 (page 153).

- Write the following command in NICSR6 (page 160):

<EI> = 0	To disable the SGEC interrupts to the host.
<OM> = 3	To enter diagnostic mode.
<ST> = 1	To precede the diagnostic descriptor (and eventually the setup descriptor).

- Poll on NICSR5<TI> to wait for the completion of the code load.
- Write A2AA0369$_{16}$ in NICSR14 (page 170) to initialize the breakpoint.
- Poll on NICSR5<DN> to wait for the completion of the NICSR14 write.

At this point, the code patch is initialized and the normal initialization sequence can go on.

Console BOOT Command (Page 275)

Format

BOOT *[qualifier] [{boot_device} [,{boot_device}]...]*

Description

The console initializes the processor and transfers execution to VMB. VMB attempts to boot the operating system from the specified device or the default boot device, if none is specified.

If a list of devices is specified, VMB attempts to boot from each device in turn. VMB transfers control to the first successfully booted image. Network devices should always be placed last in a list, since network bootstraps only terminate if a fatal hardware error occurs or an image is successfully loaded.

Console SET Command (Page 299)

SET BOOT

When using the console SET BOOT command, you may also specify a device list.

Copyright © by Digital Equipment Corporation 1990

All Rights Reserved. Printed in the U.S.A.

digital™
is a trademark of Digital Equipment Corporation.